

Abstract of the Disclosure

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Methods and apparatus are provided for

5 removing emboli during an angioplasty, stenting or  
surgical procedure comprising a catheter having an  
occlusion element, an aspiration lumen, and a blood  
outlet port in communication with the lumen, a guide  
wire having a balloon, a venous return catheter with a  
10 blood inlet port, and tubing that couples the blood  
outlet port to the blood inlet port. Apparatus is also  
provided for occluding the external carotid artery to  
prevent reversal of flow into the internal carotid  
artery. The pressure differential between the artery  
15 and the vein provides reverse flow through the artery,  
thereby flushing emboli. A blood filter may optionally  
be included in-line with the tubing to filter emboli  
from blood reperfused into the patient.